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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,577	09/27/2006	Minoru Ueshima	1092	6851
27649	7590	04/08/2008	EXAMINER	
MICHAEL TOBIAS 1629 K ST NW SUITE 300 WASHINGTON, DC 20006			LIN, KUANG Y	
			ART UNIT	PAPER NUMBER
			1793	
			MAIL DATE	DELIVERY MODE
			04/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/594,577

Applicant(s)

UESHIMA, MINORU

Examiner

Kuang Y. Lin

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S509)
Paper No(s)/Mail Date 9/27/06 & 6/15/07
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,524,699 to Cook.

The container or vessel of Cook is capable of performing the function as claimed.

3. Claim 8 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 6-31,486.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,524,699 to Cook.

With respect to claim 2, it is conventional to provide a melt container with handle means to facilitate the operation of the container (see, for example, JP 55-23,256 or JP 59-143,566 cited in IDS). With respect to claim 7, the door 109 in Cook (see figure 7a) performing the same function as a lid. Thus, to provide a lid or a door in the container of Cook is deemed to be nothing more than an obvious matter of design choice.

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6. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,524,699 to Cook as applied to claim 2 above, and further in view of US 6,225,503 to Rigdon et al.

Cook substantially shows the invention as claimed except that he does not disclose what type of mixing motor is used. However, Rigdon et al. show that it is conventional to use air motor for driving a mixing mechanism. It would have been obvious to use the air motor of Rigdon et al. in the mixing apparatus of Cook in view of the conventionality. With respect to claims 5 and 6, Cook also suggests to provide an inert atmosphere in the container to prevent the molten metal from oxidizing. To use an air motor powered by inert gas and use the exhaust to provide an inert atmosphere in lieu of providing a separate inlet for the inert gas presents no novel or unexpected result and solve on stated problem and would have been obvious to those of ordinary skill in the casting art, *In re Kuhle*, 188 USPQ 7.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 6-31,486.

It would have been obvious to place the container of JP '486 in an inert gas atmosphere to prevent molten metal from oxidizing.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 6-31,486 in view of US 5,524,699 to Cook and US 6,225,503 to Rigdon et al.

JP '486 shows to mix high melting point metal particles to molten solder by using a stirring rod. Cook shows to use a mechanical mixing device for mix metal

particles to molten metal. It would have been obvious to use the mechanical mixing device of Cook in the mixing process of JP '486 to facilitate the same. Rigdon et al. show that it is conventional to use air motor for driving a mixing mechanism. It would have been obvious to use the air motor of Rigdon et al. in the mixing apparatus of Cook in view of the conventionality. Cook also suggests to provide an inert atmosphere in the container to prevent the molten metal from oxidizing. To use an air motor powered by inert gas and use the exhaust to provide an inert atmosphere in lieu of providing a separate inlet for the inert gas presents no novel or unexpected result and solve on stated problem and would have been obvious to those of ordinary skill in the casting art, *In re Kuhle*, 188 USPQ 7.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuang Y. Lin whose telephone number is 571-272-1179. The examiner can normally be reached on Monday-Friday, 10:00-6:30,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V. King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kuang Y. Lin/
Primary Examiner, Art Unit 1793

4-1-08